

CLAIMS.

- 5 1. Use of an isotactic polypropylene produced with a metallocene catalyst system to prepare articles by injection -stretch blow moulding with a reduced cycle time, said article having excellent optical properties and rigidity and wherein the metallocene catalyst system comprises a metallocene component of formula I

$$R''_s(CpR'_{-k}) (C'pR''_{-k}) \quad MQ_2 \quad (I)$$

wherein $(C_pR'k)$ is a cyclopentadienyl or substituted cyclopentadienyl, each R' is the same or different and is hydrogen or a hydrocarbyl radical such as alkyl, alkenyl, aryl, alkylaryl, or arylalkyl radical containing from 1 to 20 carbon atoms or two carbon atoms are joined together to form a C_4 - C_6 ring, wherein $(C'pR''k)$ is a substituted or unsubstituted fluorenyl, wherein R'' is the same or different and is hydrogen or a hydrocarbyl radical such as alkyl, alkenyl, aryl, alkylaryl, or arylalkyl radical containing from 1 to 20 carbon atoms, and wherein the substituents on the C_p rings are selected to impart C_1 or C_2 symmetry to the compound; R'' is a structural bridge between the C_p and the Flu rings to impart stereorigidity that can be a C_1 - C_4 alkylene radical, a dialkyl germanium or silicon or siloxane, or a alkyl phosphine or amine radical; Q is a hydrocarbyl radical such as aryl, alkyl, alkenyl, alkylaryl, or aryl alkyl radical having from 1 -20 carbon atoms, hydrocarboxy radical having 1 -20 carbon atoms or halogen and can be the same or different from each other, and M is a metal Group IVb of the Periodic Table. Preferred metals are Zr, Ti, Hf.

- 30 2. The use of claim 1 wherein the isotactic polypropylene is an isotactic homopolymer or an isotactic random copolymer of propylene having a melt

index MI2 of from 2 to 100 g/10 min and an amount of ethylene of from 0 to 10 wt%.

3. The use of claim 1 or claim 2 wherein the metallocene catalyst component used to prepare the resin is isopropylidene-(3-tert-butyl-5-methylcyclopentadienyl)(fluorenyl) zirconium dichloride.

4. The use of any one of claims 1 to 3 to prepare single -layer articles.

10 5. The use of any one of claims 1 to 3 to prepare multi -layer articles.

6. The use according to any one of the preceding claims wherein the finished articles have very good impact strength.

15 7. The use according to any one of the preceding claims wherein the finished articles have good chemical resistance.

8. The use according to any one of the preceding claims wherein the finished articles have hot-filling capability.

20 9. The use according to any one of the preceding claims for food applications.

10. The use according to any one of the preceding claims for non -food applications.